

AMENDMENTS TO THE CLAIMS

Claims 12-15, 28-31, 50-52, 58-59, 61-63, 66, and 70 are currently amended, without acquiescence in cited basis for rejection or prejudice to pursue in a related application. Claims 40, 56-57, 67-69, and 71-79 have been cancelled. Claims 80-104 are new. A complete listing of the current pending claims is provided below and supersedes all previous claim listing(s.) No new matter has been added.

Claims 1-11 (canceled)

12. (Currently Amended) A method for regulating access by a first process to a first data location on a storage device, comprising:

receiving from the first process a request to access the first data location on a storage device, the request comprising a first set of information adapted to identify the first data location and a second set of information adapted to identify the first process;
~~the second set of information adapted to be compared with third information, the third information being adapted to identify the access rights of the first process, the third set of information being associated with the storage device.~~

comparing a corresponding portion of the second set of information with a relevant portion of the a third information which is adapted to identify an access right of the first process; and,

granting access to the first data location and modifying the third information if the corresponding portion of the second set of information matches the relevant portion of the third set of information,; and

~~denying access to the first data location if the second set of information does not match the third set of information.~~

13. (Currently Amended) The method of claim 12, ~~wherein in which the step of granting access further comprises changing data associated with a second data location by the first process to deny the second process of accessing the second data location. the first data location contains information adapted to identify the access rights of a second process, further comprising disallowing the second process access to a second data location on the storage device by changing data contained in the first data location.~~

14. (Currently Amended) The method of claim 12, ~~wherein in which~~ the third set of information is persistent.

15. (Currently Amended) The method of claim 12, ~~wherein in which~~ the storage device is a first storage device and the third set of information is stored in a second storage device.

16. (Original) The method of claim 12, wherein the second storage device is a memory.

Claims 17-27 (Canceled)

28. (Currently Amended) A computer program product that includes a computer readable storage medium comprising useable by a processor, the medium having stored thereon a sequence of instructions which, when executed by a said processor, causes said processor to execute a method for regulating access by a first process to a first data location on a storage device, the process comprising:

receiving from the first process a request to access the first data location on a storage device, the request comprising a first set of information adapted to identify the first data location and a second set of information adapted to identify the first process;
~~the second set of information adapted to be compared with third information, the third information being adapted to identify the access rights of the first process, the third set of information being associated with the storage device.~~

comparing a corresponding portion of the second set of information with a relevant portion of the a third information which is adapted to identify an access right of the first process; and,

granting access to the first data location and modifying the third information if the
corresponding portion of the second set of information matches the relevant portion
of the third set of information, and

~~denying access to the first data location if the second set of information does not match~~
~~the third set of information.~~

29. (Currently Amended) The computer program product of claim 28, wherein in which the
step of granting access further comprises changing data associated with a second data location by
the first process to deny the second process of accessing the second data location. ~~the first data~~
~~location contains information adapted to identify the access rights of a second process, further~~
~~comprising disallowing the second process access to a second data location on the storage device~~
~~by changing data contained in the first data location.~~

30. (Currently Amended) The computer program product of claim 28, wherein in which the
third ~~set of~~ information is persistent.

31. (Currently Amended) The computer program product of claim 28, wherein in which the
storage device is a first storage device and the third ~~set of~~ information is stored in a second
storage device.

32. (Previously Presented) The computer program product of claim 28, wherein the second
storage device is a memory.

Claims 33-48 (canceled)

49. (Previously Presented) The method of claim 12, in which the first process comprises
multiple processes.

50. (Currently Amended) The method of claim 12, wherein in which the request further
comprises an additional sets of information adapted to identify the access right ~~rights~~ of the first
process, further comprising processing the additional ~~sets of~~ information to determine the access
right ~~rights~~.

51. (Currently Amended) The method of claim 50, wherein the access to the first data
location is granted, further comprises ~~comprising~~ granting access to the first data location when

both the ~~results of processing of~~ said additional ~~sets of~~ information, and the ~~results of comparing comparison of a corresponding portion of~~ the second ~~set of~~ information with a relevant portion of the third ~~set of~~ information succeed ~~are successful~~.

52. (Currently Amended) The method of claim 50, further comprising denying access to the first data location when either the ~~results of processing of~~ said additional ~~sets of~~ information, or the ~~results of comparing comparison of a corresponding portion of~~ the second ~~set of~~ information with a relevant portion of the third ~~set of~~ information fails ~~are failure~~.

53. (Previously Presented) The method of claim 12, wherein said request to access the first data location is a data output request.

54. (Previously Presented) The method of claim 12, wherein said request to access the first data location is a data input request.

55. (Previously Presented) The method of claim 12, wherein said request to access the first data location is a access-blocking request.

56-57 (Cancelled)

58. (Currently Amended) The method of claim 13, in which the step of ~~wherein~~ changing data in the second ~~first~~ data location further comprises changing ~~the data~~ a second storage key to a pre-defined value.

59. (Currently Amended) The method of claim 13, wherein the request further comprises an additional information adapted to identify the access right ~~rights~~ of a second process to multiple storage devices, ~~further comprising disallowing the second process access to said multiple storage devices~~.

60. (Previously Presented) The computer program product of claim 28, wherein the first process comprises multiple processes.

61. (Currently Amended) The computer program product of claim 28, ~~wherein~~ in which the request further comprises an additional ~~sets of~~ information adapted to identify the access right ~~rights~~ of the first process, further comprising processing the additional ~~sets of~~ information to determine access right ~~rights~~.

62. (Currently Amended) The computer program product of claim 61, wherein the access to the first data location is granted, further comprises ~~comprising~~ granting access to the first data location when both the ~~results of processing of~~ said additional ~~sets of~~ information, and the ~~results of comparing comparison of a corresponding portion of~~ the second ~~set of~~ information with a relevant portion of the third set of information succeed ~~are successful~~.

63. (Currently Amended) The computer program product of claim 61, further comprising denying access to the first data location when either the ~~results of processing of~~ said additional ~~sets of~~ information, or the ~~results of comparing comparison of a corresponding portion of~~ the second ~~set of~~ information with a relevant portion of the third set of information fails ~~are failure~~.

64. (Previously Presented) The computer program product of claim 28, wherein said request to access the first data location is a data output request.

65. (Previously Presented) The computer program product of claim 28, wherein said request to access the first data location is a data input request.

66. (Currently Amended) The computer program product of claim 28, ~~wherein in which~~ said request to access the first data location is an ~~a~~ access-blocking request.

67-69. (Cancelled)

70. (Currently Amended) The computer program product of claim 29, in which ~~wherein~~ the request further comprises information adapted to identify the access right ~~rights~~ of a second process to multiple storage devices, ~~further comprising disallowing denying the second process access to said multiple storage devices~~.

71-79. (Cancelled)

80. (New) The method of claim 12, in which the step of modifying the third information is performed by applying a logical or operator to the third information and a fourth information.

81. (New) The method of claim 12, in which the step of modifying the third information is performed by applying a logical and operator to the third information and the fourth information.

82. (New) The method of claim 80, in which the fourth information is a key mask.

83. (New) The method of claim 12 further comprises denying access to the first data location if the corresponding portion of the second information does not match the relevant portion of the third information.

84. (New) The method of claim 83, in which the step of denying access further comprising sending a message to the first process or generating a fault.

85. (New) The computer program product of claim 28, in which the step of modifying the third information is performed by applying a logical or operator to the third information and a fourth information.

86. (New) The computer program product of claim 28, in which the step of modifying the third information is performed by applying a logical and operator to the third information and the fourth information.

87. (New) The computer program product of claim 28 further comprises denying access to the first data location if the corresponding portion of the second information does not match the relevant portion of the third information.

88. (New) A system for regulating access by a first process to a first data location on a storage device, comprising:

means for receiving from the first process a request to access the first data location on a storage device, the request comprising a first information adapted to identify the first data location and a second information adapted to identify the first process;

means for comparing a corresponding portion of the second information with a relevant portion of a third information which is adapted to identify an access right of the first process; and

means for granting access to the first data location and modifying the third information if the relevant portion of the second information matches the corresponding portion of the third information.

89. (New) The system of claim 88, wherein the first process comprises multiple processes.

90. (New) The system of claim 88, in which the request further comprises additional information adapted to identify the first process.

91. (New) The system of claim 90, in which the means for comparing a corresponding portion of the second information with a relevant portion of the third information comprises:

means for comparing an additional information to the third information;

means for generating a comparison success if both a corresponding portion of the additional information matches a first relevant portion of the third information, and, a corresponding portion of the second information matches a second relevant portion of the third information; and

means for generating a comparison failure if either the corresponding portion of the additional information does not match the first relevant portion of the third information or if a corresponding portion of the second information does not match the second relevant portion of the third information.

92. (New) The system of claim 88, in which the means for granting access further comprising means for changing one or more additional storage keys each of which is associated with an additional data location by the first process to deny the second process of accessing the additional data locations.

93. (New) The system of claim 92, in which the means for changing the data in the second data location further comprises means for changing the additional storage keys to pre-defined values.

95. (New) The system of claim 88, in which the request to access the first data location is a data output request.

96. (New) The system of claim 88, in which the request to access the first data location is a data input request.

97. (New) The system of claim 88, in which the request to access the first data location is an access-blocking request.

98. (New) The system of claim 88, in which the means for modifying the third information comprises means for applying a logical OR operator to the third information and a fourth information.

99. (New) The system of claim 88, in which the means for modifying the third information comprises means for applying a logical AND operator to the third information and the fourth information.

100. (New) The system of claim 88 further comprises means for denying access to the first data location if the corresponding portion of the second information does not match the relevant portion of the third information.

101. (New) The method of claim 83, in which the step of denying access is initiated by the first process.

102. (New) The method of claim 83, in which the step of denying access is initiated by the storage device.

103. (New) The computer program product of claim 87, in which the step of denying access is initiated by the first process.

104. (New) The computer program product of claim 87, in which the step of denying access is initiated by the storage device.